

Figure 1

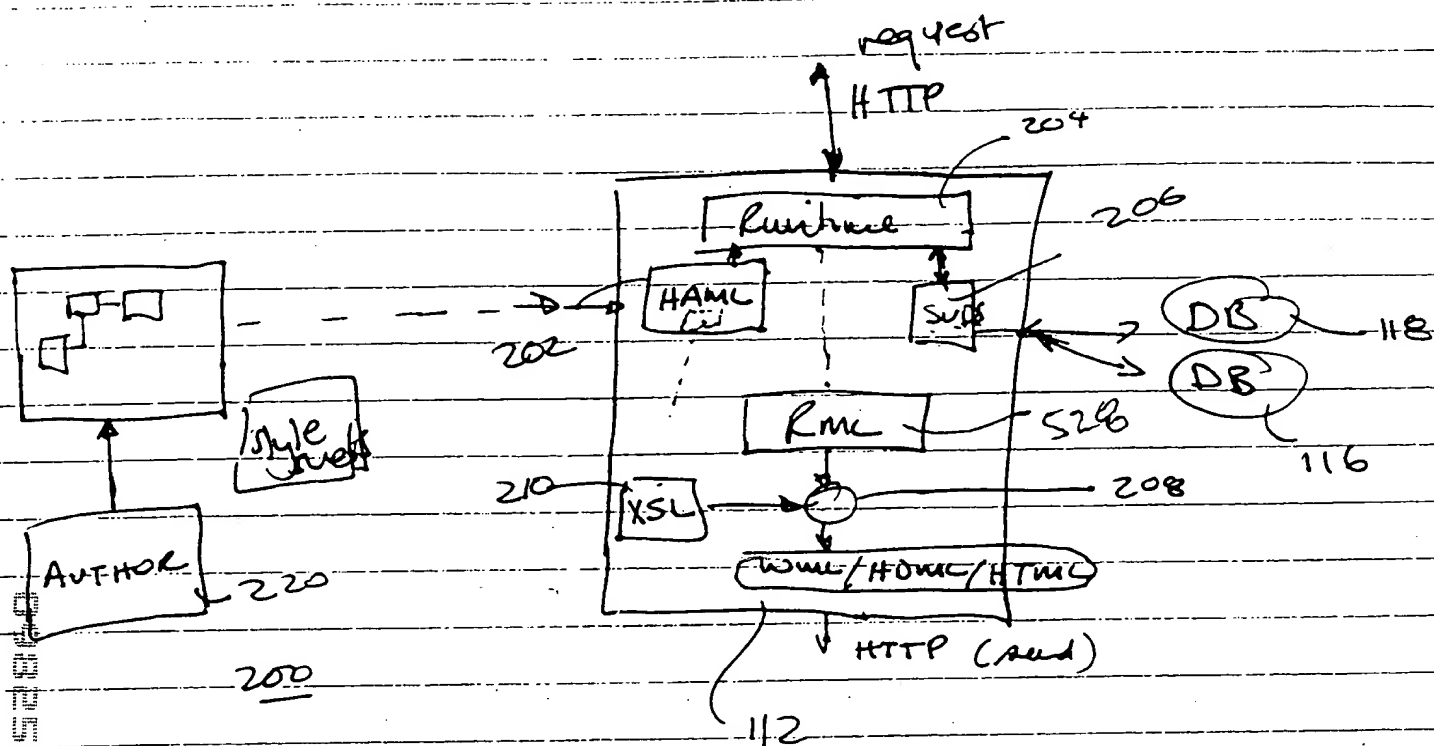


Figure 2



09825350.040401

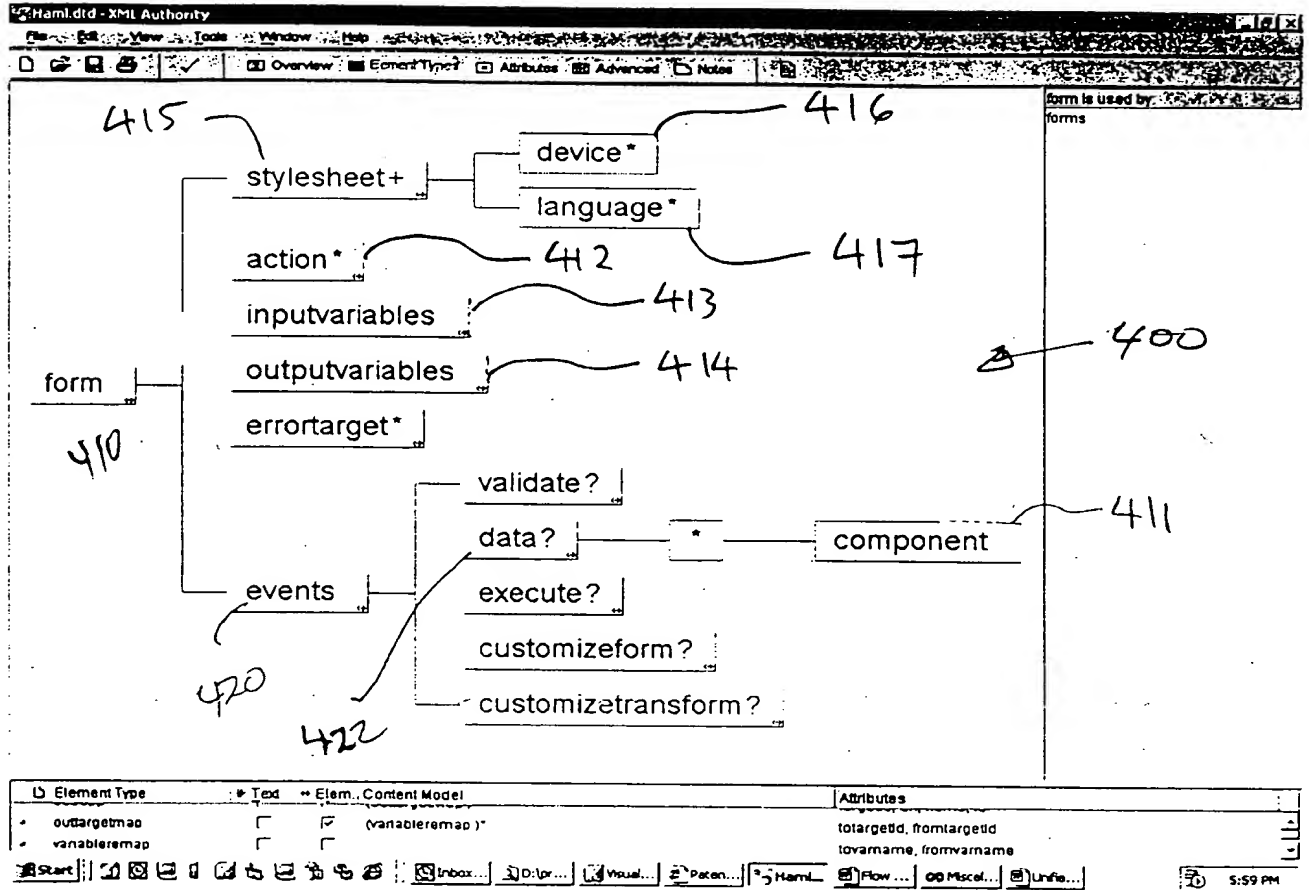


Figure 4

The diagram shows the structure of the RML element. The RML element is the root, containing the following elements and attributes:

- session
- appconstants
- variables
- actions
- directory
  - binding?
  - items
    - item?
      - attributes
      - items
  - data\*
    - markup?
    - redirect?
- markup?
- redirect?
- dataResults
  - data\*

Handwritten annotations 528 through 537 point to various elements and attributes in the diagram:

- 528: RML
- 529: session
- 530: appconstants
- 531: variables
- 532: actions
- 533: directory
- 534: item?
- 535: attributes
- 536: data\*
- 537: dataResults

Figure 5

040400552850

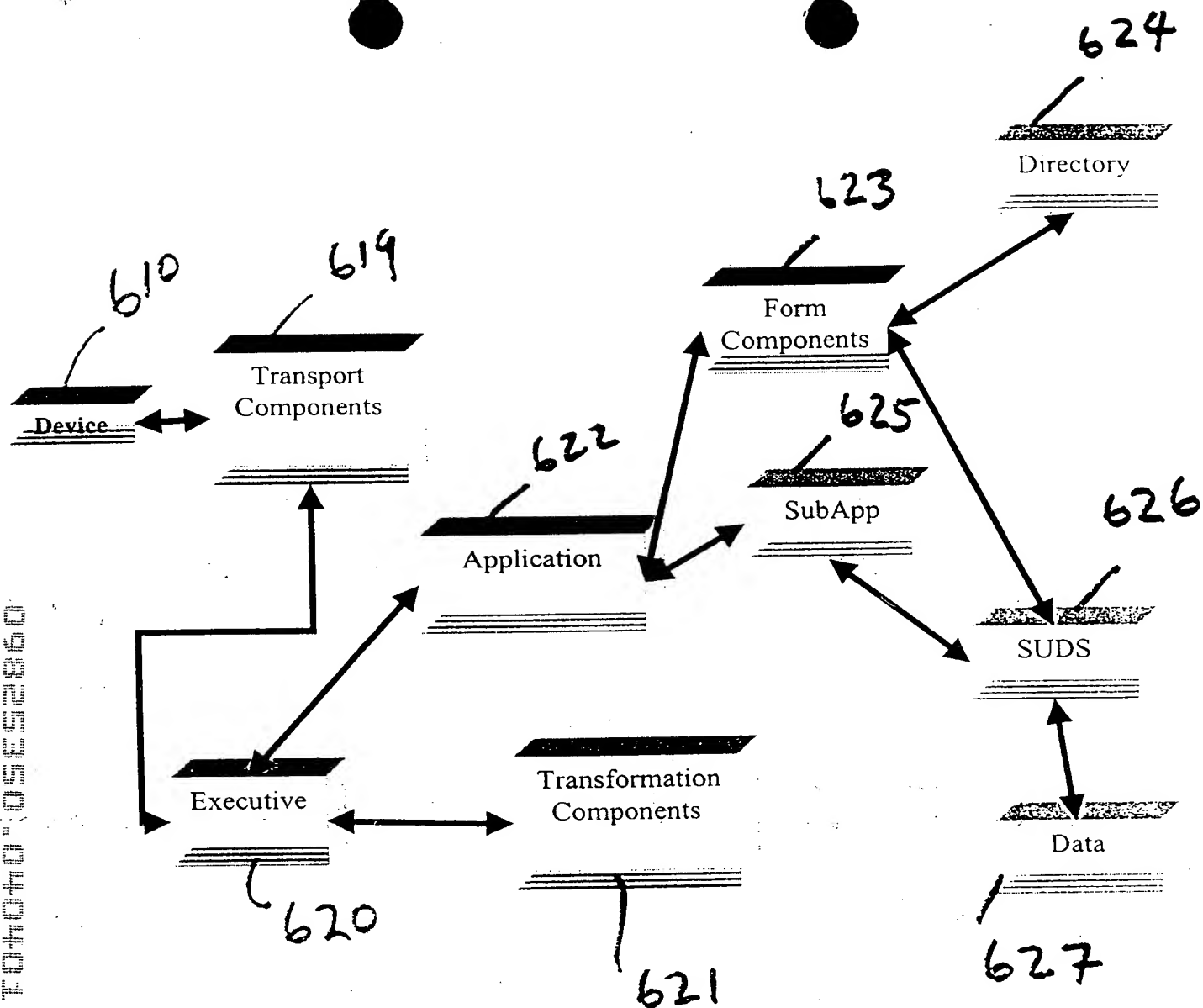


Fig 6

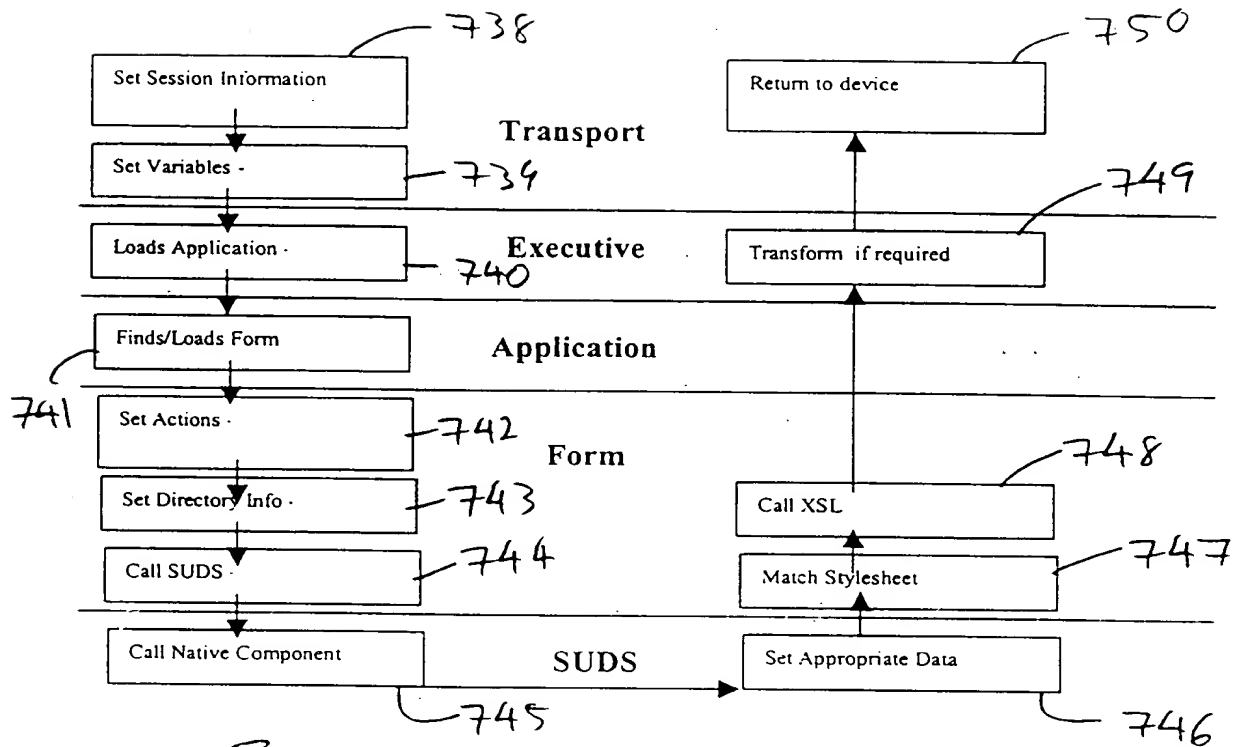


Figure 7

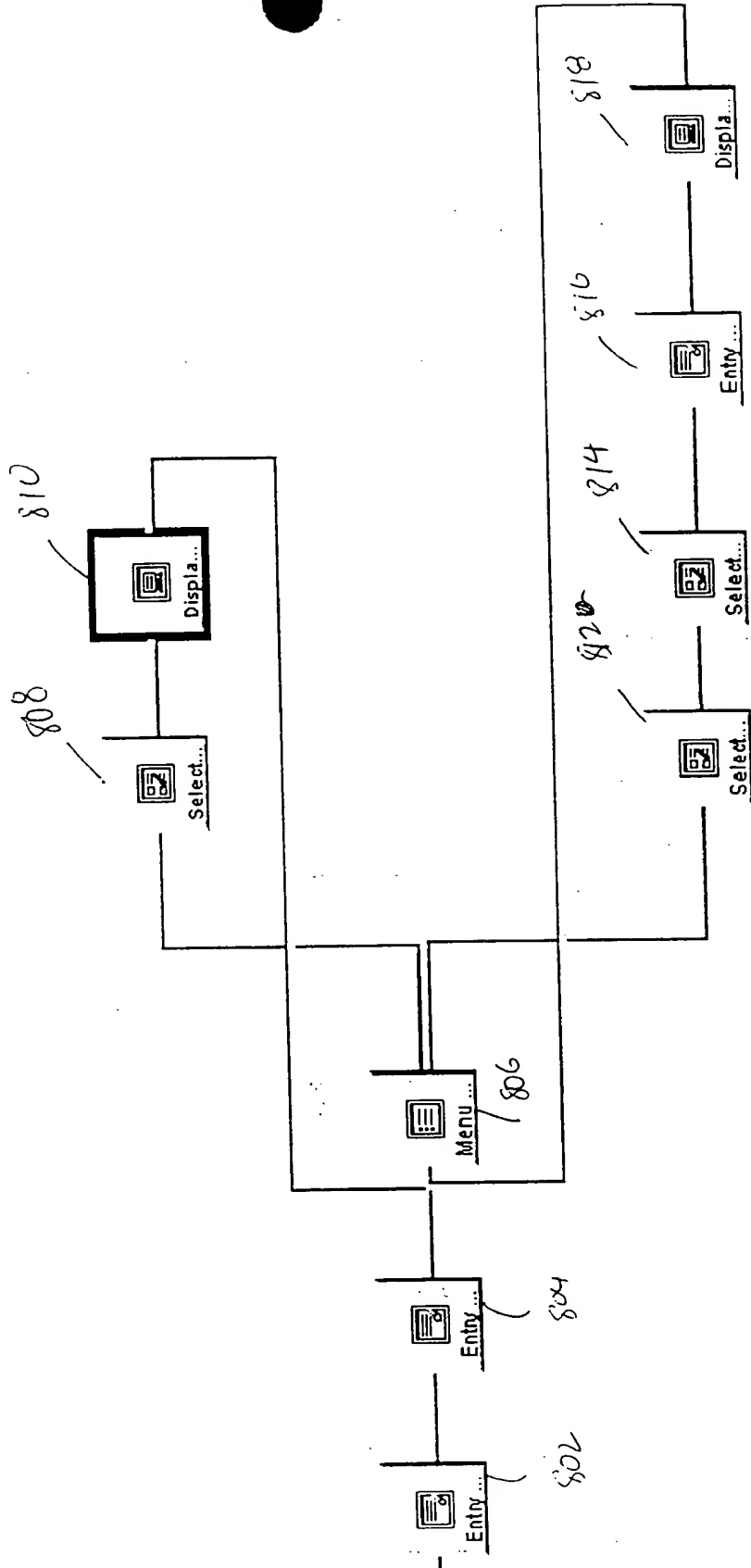


Figure 8(a)



0085350 040401

```

<?xml version="1.0" encoding="UTF-8" ?>
- <application usecookies="false" id="{F6681A6F-FB7C-4901-855C-08791DDE8DC8}"
  securevariables="false">
    <description version="1" name="MQBanking" />
    <outtargets />
    <startform totargetid="UserID" />
    <subapps />
    <errortarget totargetid="UserID" />
  - <properties>
    <variable default="209.23.23.23" name="ServerIP" />
  </properties>
  - <sessionvariables>
    <variable name="Session" />
  </sessionvariables>
  - <forms>
    - <form targetid="UserID" includeheaders="false">
      <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
      <action totargetid="Password" name="OK" />
      <inputvariables />
      - <outputvariables>
        <variable name="UserID" />
      </outputvariables>
      <events />
    </form>
    - <form targetid="Password" includeheaders="false">
      <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
      <action totargetid="Main" name="OK" />
      - <inputvariables>
        <variable name="UserID" />
      </inputvariables>
      - <outputvariables>
        <variable name="Session" />
      </outputvariables>
      <events />
    </form>
    - <form targetid="Main" includeheaders="false">
      <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
      <action totargetid="Account" name="Account Balance" />
      <action totargetid="Bill Payment" name="Bill Payment" />
      <action totargetid="Transfer" name="Account Transfer" />
      <inputvariables />
      <outputvariables />
      <events />
    </form>
    - <form targetid="Account" includeheaders="false">
      <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
      <action totargetid="Details" name="OK" />
      <inputvariables />
      - <outputvariables>
        <variable name="AccountID" />
      </outputvariables>
    </form>
  </forms>
</application>

```

Fig 8(6)

09825360-040401

```
<events />
</form>
- <form targetid="Details" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Main" name="OK" />
  <inputvariables>
    <variable name="AccountID" />
  </inputvariables>
  <outputvariables />
  <events />
</form>
- <form targetid="Bill Payment" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Bill" name="OK" />
  <inputvariables />
  <outputvariables>
    <variable name="AccountID" />
  </outputvariables>
  <events />
</form>
- <form targetid="Bill" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Amount" name="OK" />
  <inputvariables>
    <variable name="AccountID" />
  </inputvariables>
  <outputvariables>
    <variable name="BillID" />
    <variable name="AccountID" />
  </outputvariables>
  <events />
</form>
- <form targetid="Amount" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Confirm" name="OK" />
  <inputvariables>
    <variable name="BillID" />
    <variable name="AccountID" />
  </inputvariables>
  <outputvariables>
    <variable name="AccountID" />
    <variable name="BillID" />
    <variable name="Amount" />
  </outputvariables>
  <events />
</form>
- <form targetid="Confirm" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Main" name="Cancel" />
  <inputvariables>
    <variable name="AccountID" />
    <variable name="BillID" />
```

Fig 8(c)

```

    <variable name="Amount" />
  </inputvariables>
  <outputvariables>
    <variable name="AccountID" />
    <variable name="BillID" />
    <variable name="Amount" />
  </outputvariables>
  <events />
</form>
</forms>
<errors />
<events />
</application>

```

09825350-040401

Fig 8(d)

```

<rm1>
- <dataresults>
- <data name="source1">
- <RECORDS>
- <RECORD>
  <Blair PK="1">172-32-1176</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>White</LastName>
  <FirstName>Johnson</FirstName>
</RECORD>
- <RECORD>
  <Blair PK="1">213-46-891</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>Green</LastName>
  <FirstName>Marjorie</FirstName>
</RECORD>
- <RECORD>
  <Blair PK="1">238-95-7766</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>Carson</LastName>
  <FirstName>Cheryl</FirstName>
</RECORD>
- <a>
- <RECORD>
  <Blair PK="1">238-95-7766</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>Carson</LastName>
  <FirstName>Cheryl</FirstName>
</RECORD>
</a>
- <a>
- <b>
- <RECORD>
  <Blair PK="1">238-95-7766</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>Carson</LastName>
  <FirstName>Cheryl</FirstName>
</RECORD>
</b>
</a>
</RECORDS>

```

Fig. 9 (a)

09825350 040401  
FOUO "0552360

```
</data>
- <data name="source2">
- <RECORDS>
- <RECORD>
  <Blair PK="1">aaaaaa</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>White</LastName>
  <FirstName>Johnson</FirstName>
</RECORD>
- <RECORD>
  <Blair PK="1">bbbbbbb</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>Green</LastName>
  <FirstName>Marjorie</FirstName>
</RECORD>
- <RECORD>
  <Blair PK="1">cccccc</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>Carson</LastName>
  <FirstName>Cheryl</FirstName>
</RECORD>
- <a>
- <RECORD>
  <Blair PK="1">ddddddd</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>Carson</LastName>
  <FirstName>Cheryl</FirstName>
</RECORD>
</a>
- <a>
- <b>
- <RECORD>
  <Blair PK="1">eeeeeeee</Blair>
  <Test1 PK="1">1</Test1>
  <Test2 PK="1">2</Test2>
  <Test3 PK="1">3</Test3>
  <LastName>Carson</LastName>
  <FirstName>Cheryl</FirstName>
</RECORD>
</b>
</a>
</RECORDS>
</data>
</dataresults>
```

Fig. 9(b)

```
- <actions>
  <action formatstring="" actionid="OK" querystring="?
    _SQRSIGN=A&_SQAPPID={B77444A1-BD9E-4248-A664-
    6C483F8B4540}&_ACTIONID=OK&_SQFORMID={8D7B4336-6341-
    4D2C-B2D8-49FE88D1B13A}&EmployeeID=$EmployeeID" />
</actions>
- <dictionary>
  <variable />
  <variable />
</dictionary>
</rml>
```

0985550"04040  
T04040"05552860

fy9(c)

```

- <xsl:stylesheet xmlns:xsl="http://www.w3.org/TR/WD-xsl">
- <xsl:template match="/">
- <wml>
- <head>
  <meta name="FormType" content="SQSelectForm" />
  <meta name="ListMethod" content="numeric" />
</head>
- <card>
  <xsl:attribute name="title">qwe</xsl:attribute>
- <p>
  - <select>
    <xsl:attribute name="title">qwe</xsl:attribute>
    <xsl:attribute name="name">asd</xsl:attribute>
    - <xsl:for-each select="/rml/dataresults/data
      [@name='source2']//RECORD">
      - <option>
        - <xsl:attribute name="value">
          <xsl:value-of select="Blair" />
          z1z
          <xsl:value-of select="Test1" />
          z1z
          <xsl:value-of select="Test2" />
          z1z
          <xsl:value-of select="Test3" />
        </xsl:attribute>
        - <xsl:attribute name="title">
          <xsl:value-of select="LastName" />
          ,
          <xsl:value-of select="FirstName" />
          ,
          <xsl:value-of select="/rml/data
            [@name='source1']/RECORDS/RECORD/Blair" />
        </xsl:attribute>
        blah blah blah
      </option>
    </xsl:for-each>
  </select>
</p>
- <xsl:for-each select="/rml/actions//action">
  - <do>
    <xsl:attribute name="type">accept</xsl:attribute>
    - <xsl:attribute name="label">
      <xsl:value-of select="@actionid" />
    </xsl:attribute>
    - <go>
      - <xsl:attribute name="href">
        <xsl:value-of select="@querystring" />
      </xsl:attribute>
    </go>
    </do>
  </xsl:for-each>
</card>

```

Fig 10(a)

</wml>  
</xsl:template>  
</xsl:stylesheet>

09825350-040401

Fig 10(b).



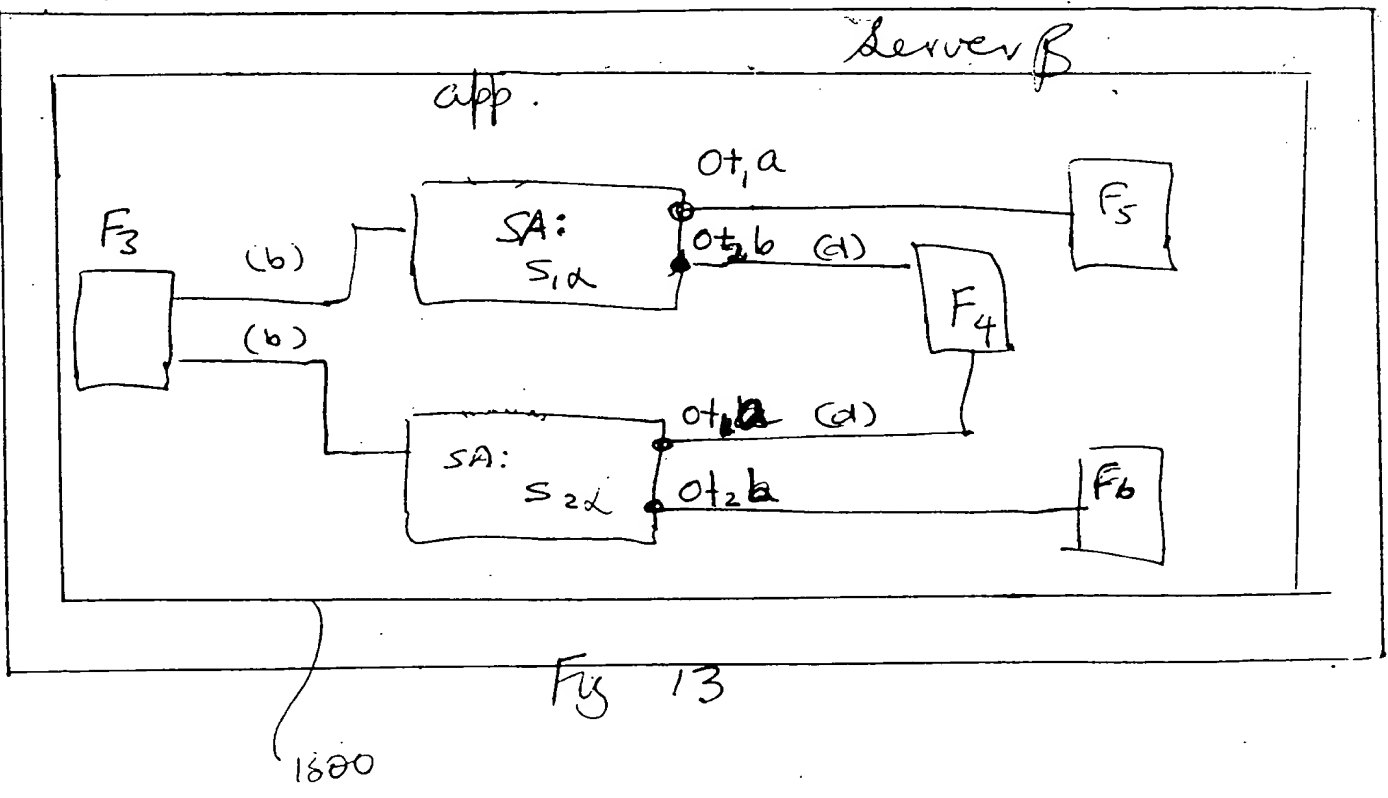
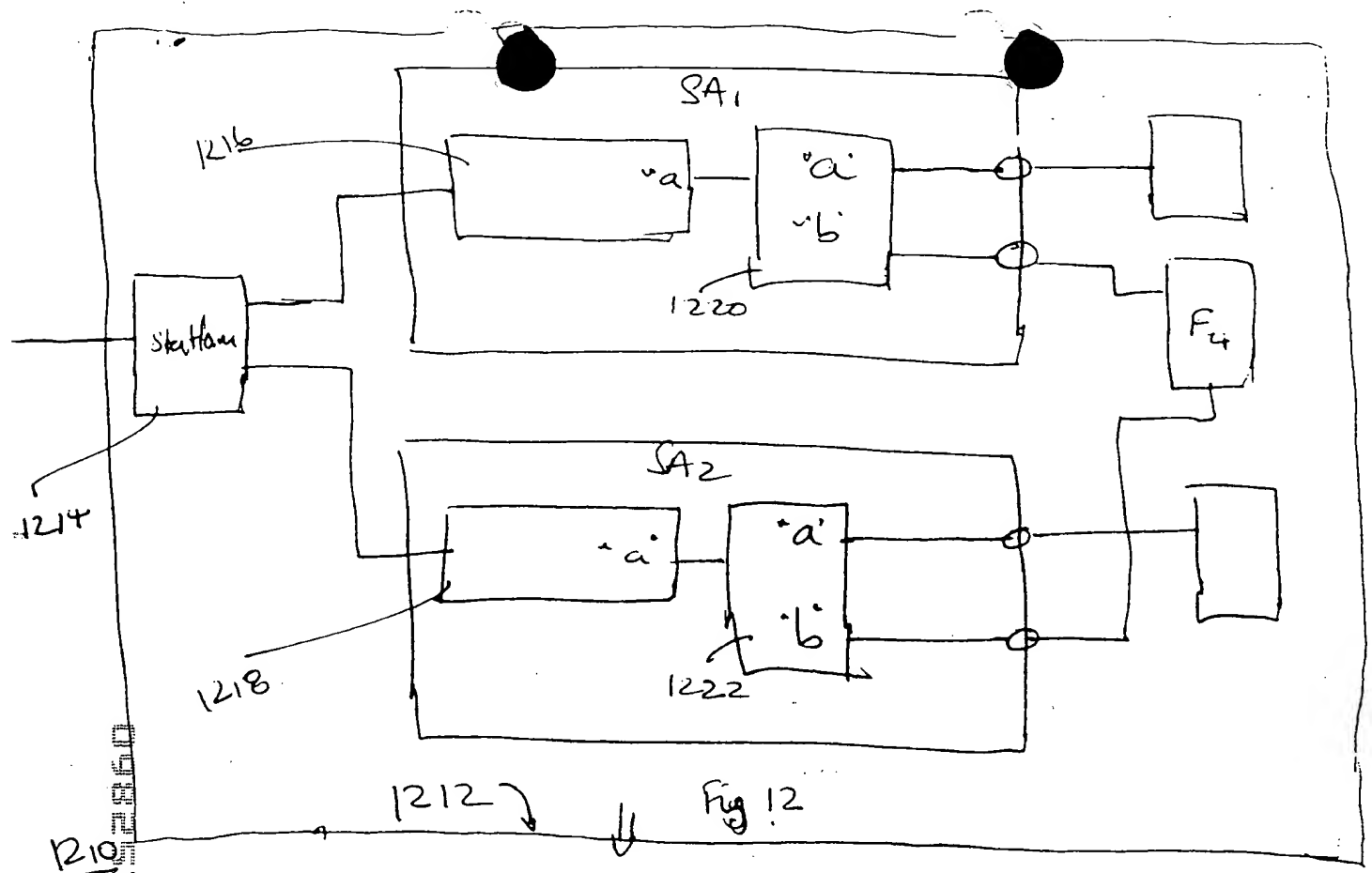
```

- <wml>
- <head>
  <meta name="FormType" content="SQSelectForm" />
  <meta name="ListMethod" content="numeric" />
</head>
- <card title="Select Account">
- <p>
  - <select title="Select Account" name="HoldingsAccountID">
    <option value="1" title="Acct 10314">Acct 10314</option>
    <option value="2" title="Acct 11345">Acct 11345</option>
  </select>
  <br />
</p>
- <do type="accept" label="OK">
  <go href="?_SQRSIGN=A&_SQAPPID={8D360BDF-E570-45E9-BEC1-
    4E5DD949C5C0}&_ACTIONID=OK&_SQFORMID={BCC091A1-63D4-
    11D3-9E34-0090273EFC3B}
    &HoldingsAccountID=$(HoldingsAccountID)
    &UserID=246531&Session=1" />
</do>
</card>
</wml>

```

104040-05E52B50

Fig- 11



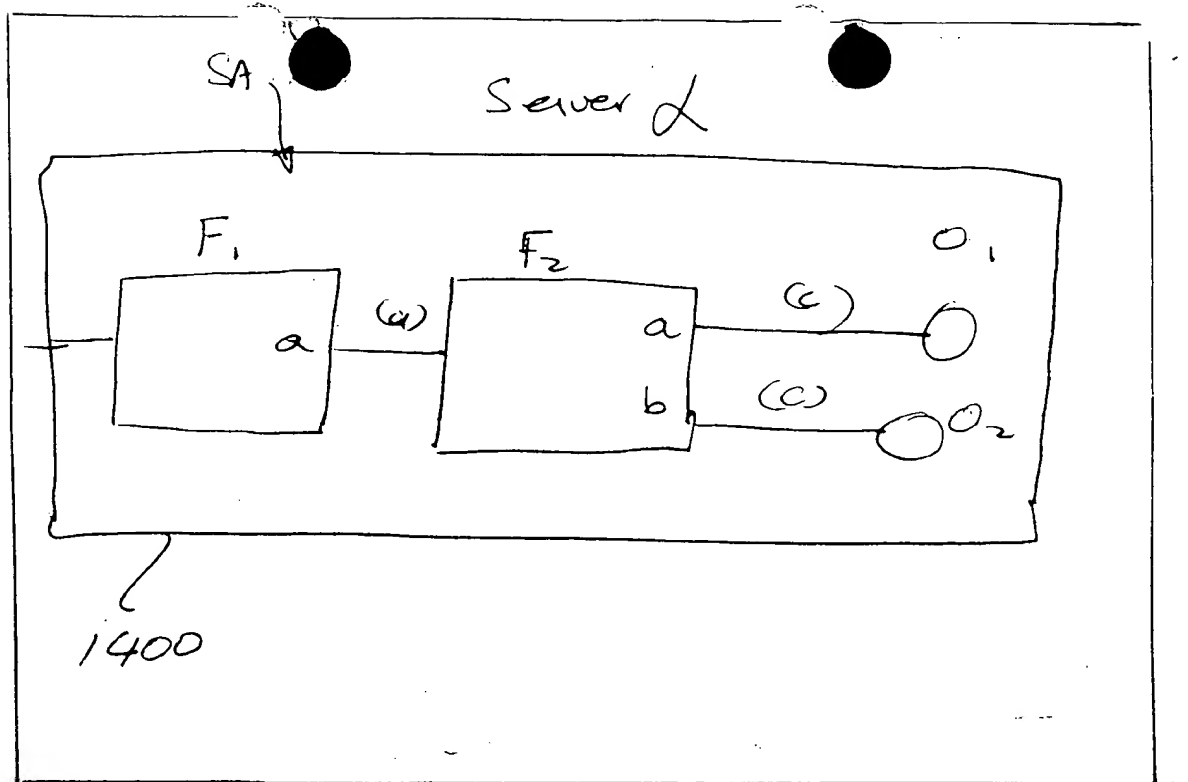


Figure 14.

09825350-040401

TOHOTO" 05E52860

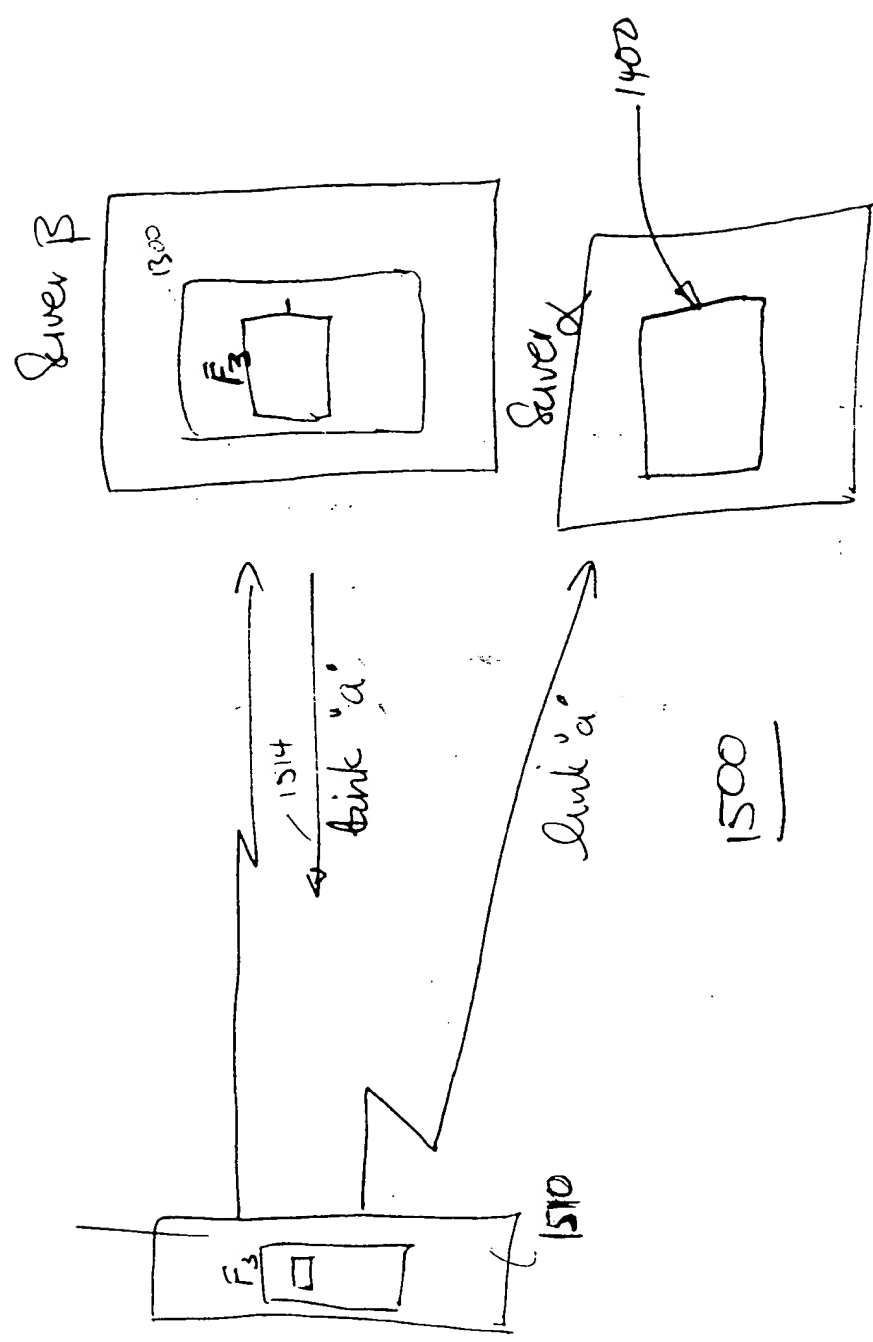


Fig 15

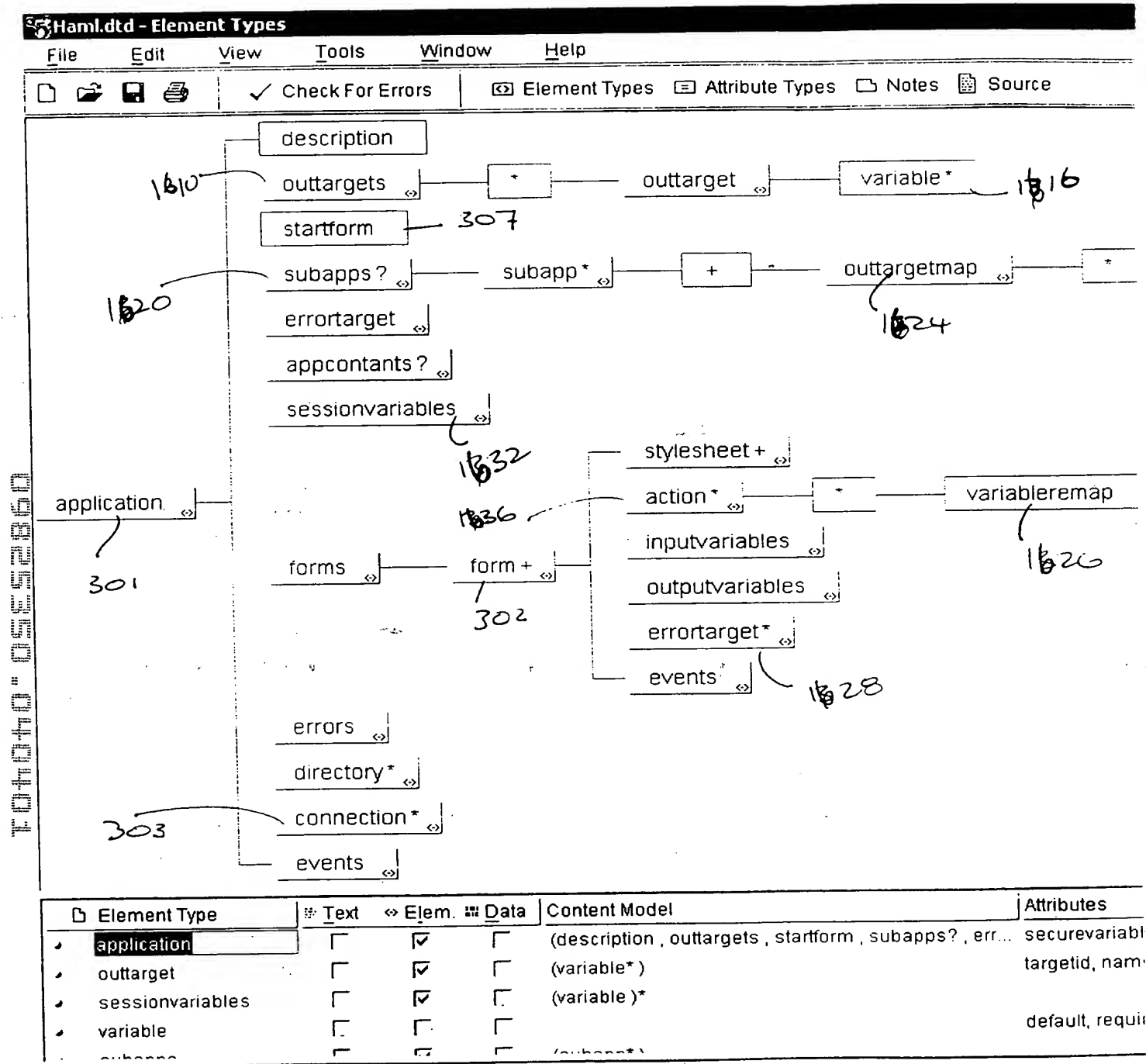


Figure 1.6

#### Receive request

- Determine request signature
  - app
  - targetid
  - language
  - markup
- Add to Runtime XML (RML)
  - Request signature
  - Dictionary element containing the Name/value pairs from request
- Load app
- Pass RML to app
- Process app
  - Find targetid?
    - Subapp
      - Load subapp
      - Pass RML to app
      - Process app
    - Form
      - Generate Action urls and add them to the RML
        - If no cookies
          - Include all variables
            - Remap to new names as described in HAML
        - Find a StyleSheet that matches the language and markup requested
        - Process Stylesheet
- If cookies are on and the device supports cookies
  - Build cookie creation instructions for:
    - Out variables in the RML
      - Remap to new names as described in HAML
    - Session variables in the RML
      - Remap to new names as described in HAML
- Return generated markup

Fig 17